

# LABORATORY DESIGN

A portfolio of designs of  
school science laboratories

*2012 edition V1*

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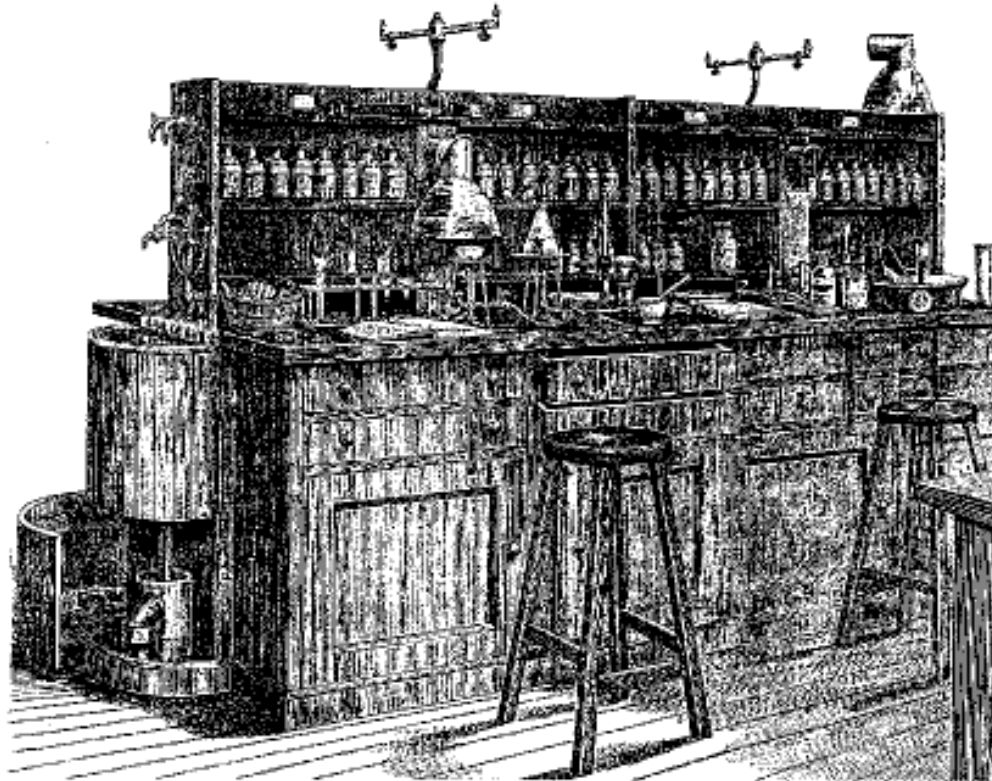
***All the designs in this portfolio were contributed by firms and organisations with the intent that a wide range of designs for school science laboratories should be made available to all those who are working to provide good quality laboratories for children to learn in.***

*Where possible, designs have been attributed to the appropriate firm or organisation. These include:*

LDTL Laboratory Design for Teaching and Learning project  
DCSF Department for Children, Schools and Families, *now the*  
DfE Department for Education  
DENI Dept of Education, Northern Ireland  
N / RSLCs National and Regional Science Learning Centres  
JISC Joint Information Systems Committee of HEFCE

Staffordshire (*and A-Z Partnerships Ltd*)  
Kings School, Peterborough (*Project Faraday school*)  
East Barnet School (*Project Faraday school*)  
Key Stage S+B Ltd ESA McIntosh  
British Thornton  
Network Commercial Systems Grant Westfield  
Arboles Gratnells Flamefast Atkins  
Heat and Combustion Supplies  
Spaceoasis

The way they used to be ?



from CLEAPSS Guide L14

# Circles – double Lab



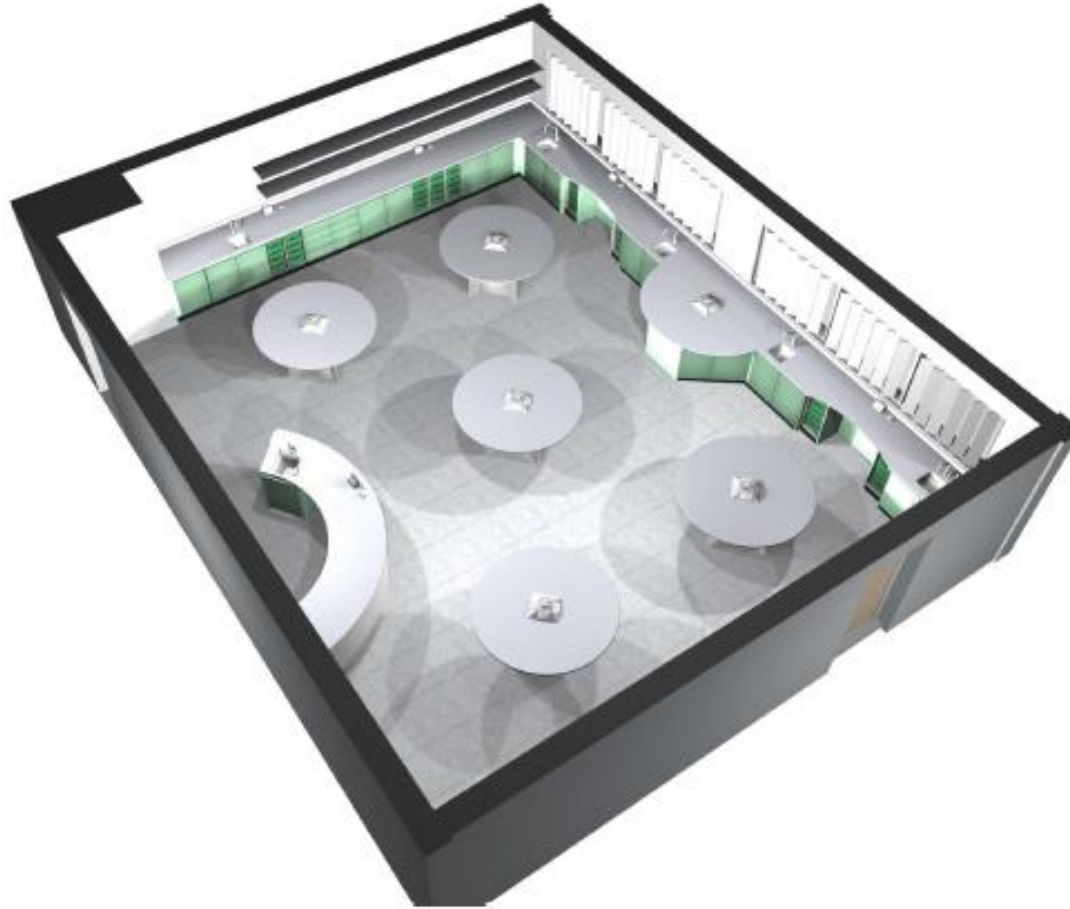
National SLC, York

# Circles - linked



S+B

# Circles and perimeter



Frith Architects

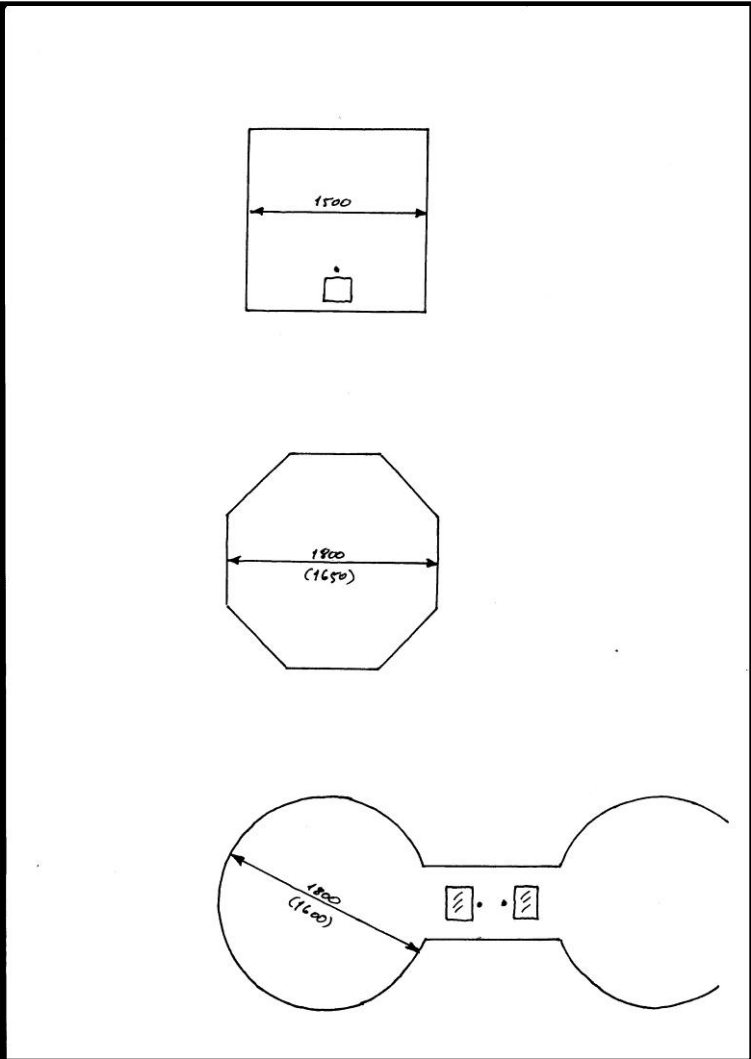
# Circle - adjustable



British Thornton



# Square – Circle - Octagon



# Octagons – linked 1



LDTL

# Octagons – linked 2



LDTL

# Octagons - linked



ESA

# Octagons – tall services



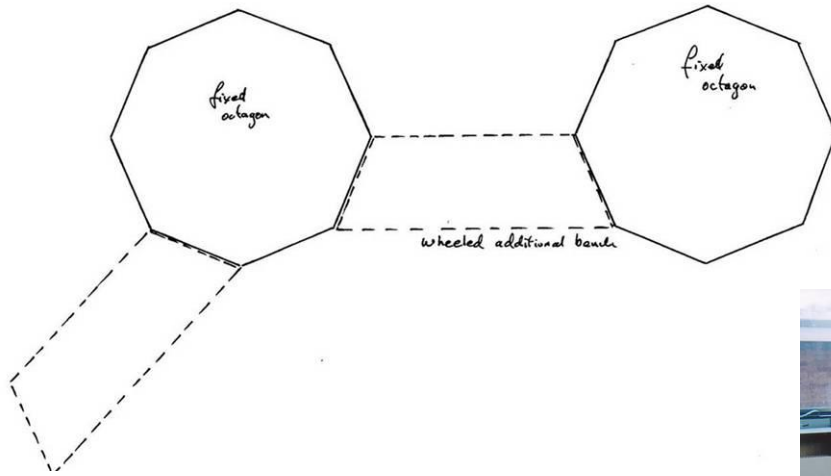
ESA

# Octagons – separate practical area



Chemistry - Anon

# Octagon + Trapezium



Staffordshire *with* S+B

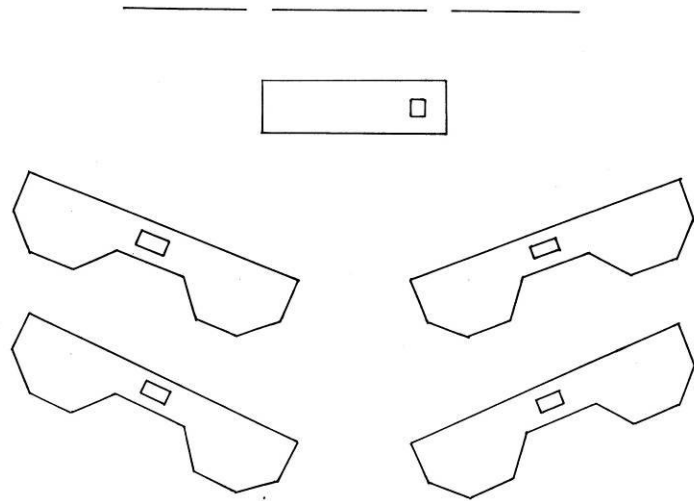
# Octagons – Special School



LDTL



# Half Octagons



Anon



# Octagons – in line



Anon



# Peninsula - Octagon



Key Stage

# Peninsulas 1



LDTL

# Peninsulas 2



LDTL

# Thin peninsula



Anon

# Perimeter - ICT

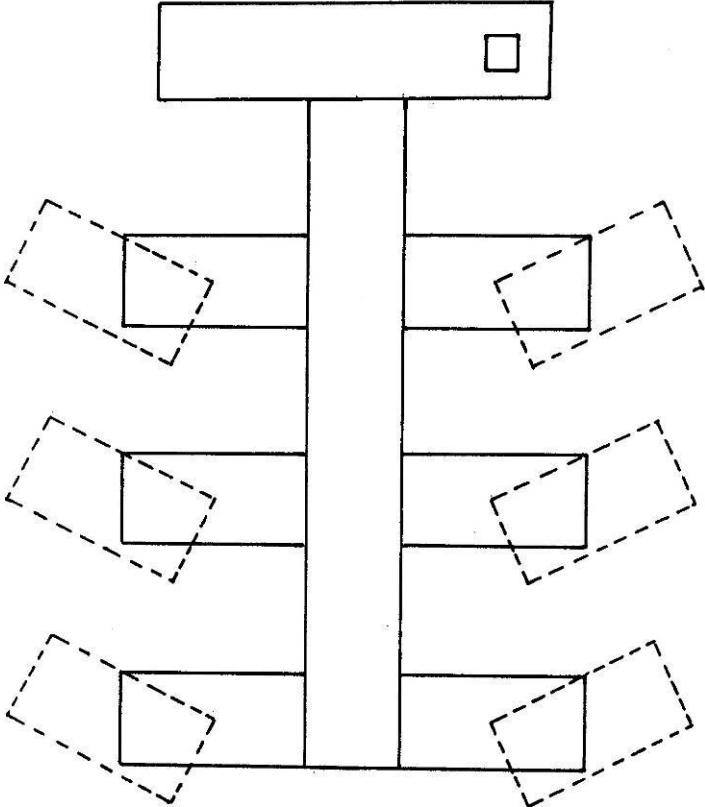


ESA



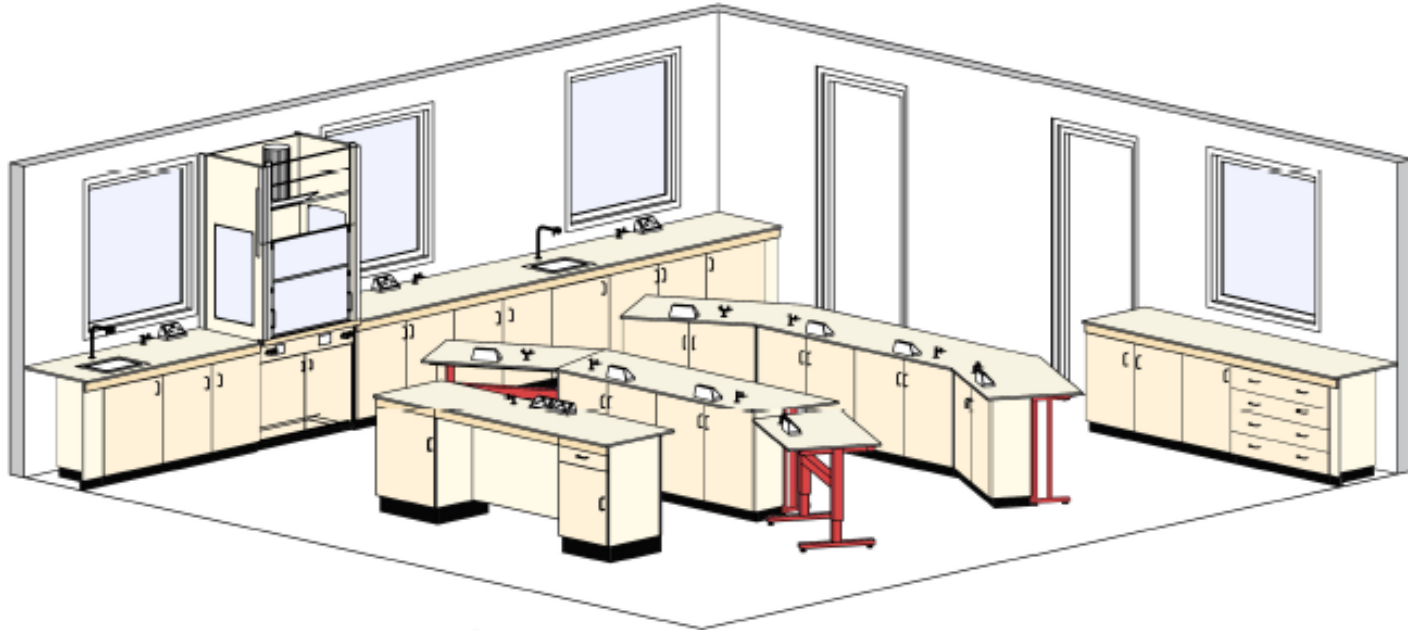
# Central spine

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Anon

# Traditional - updated



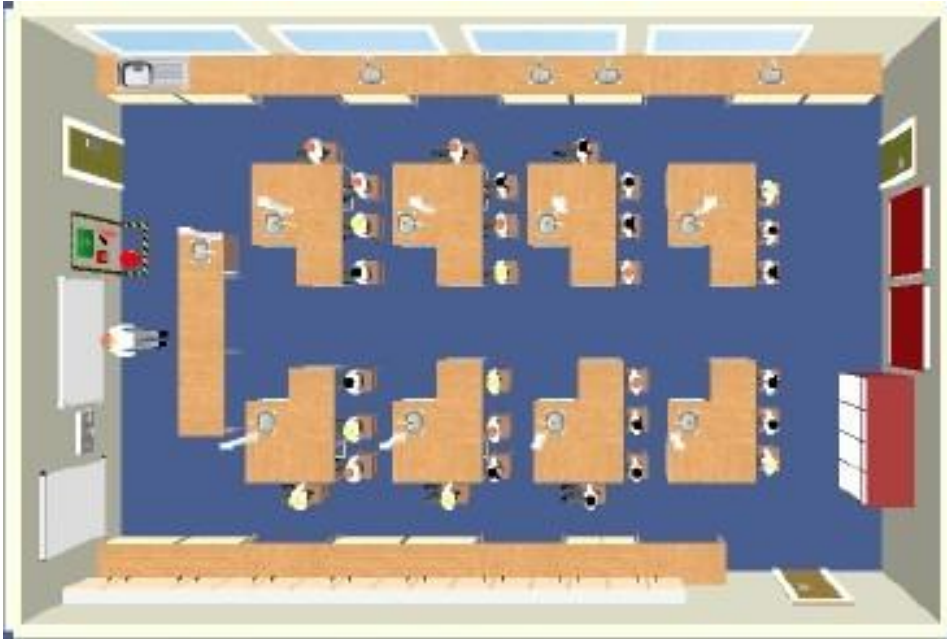
Crossbrooks

# Rectangles – fixed bollards



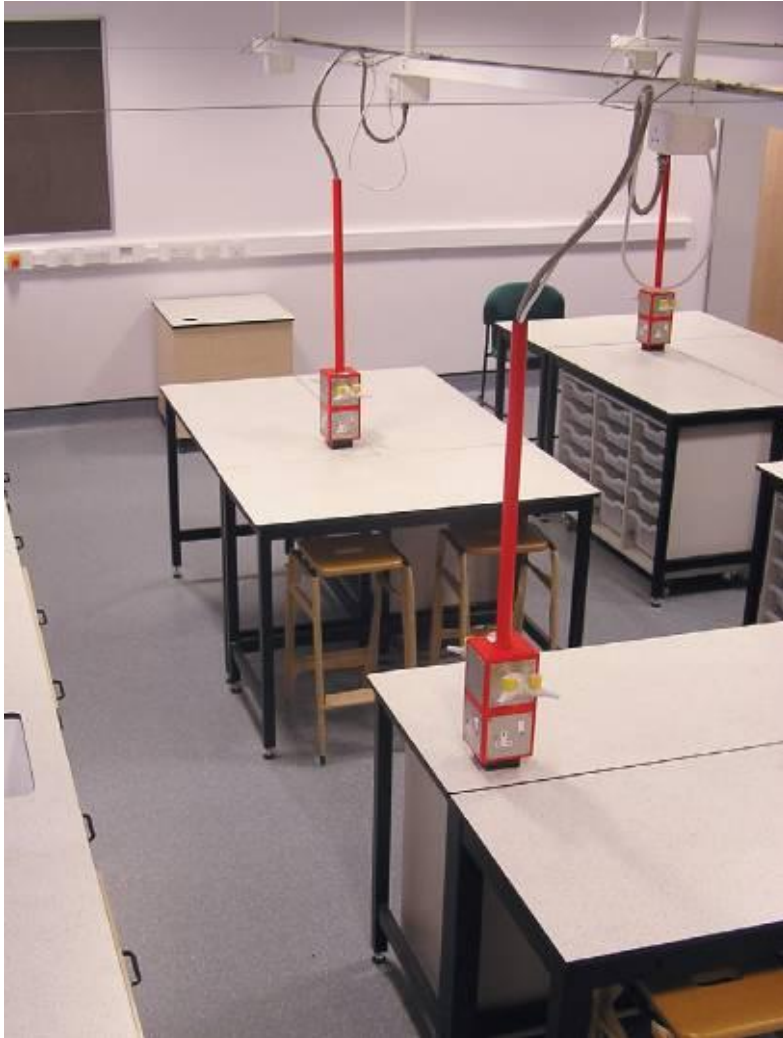
LDTL

# Rectangles – overhead services



LDTL + Anon

# Rectangles – overhead services

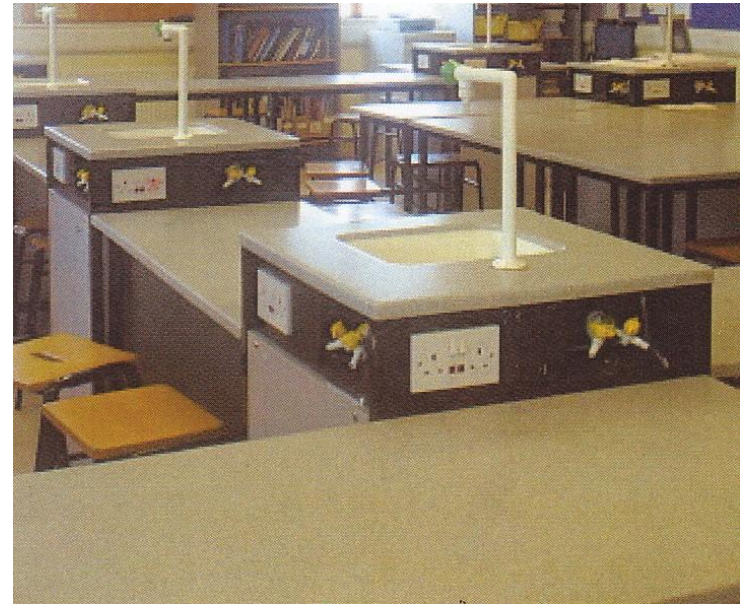


Grant Westfield

# Rectangles – tall bollards



Bluecoat School

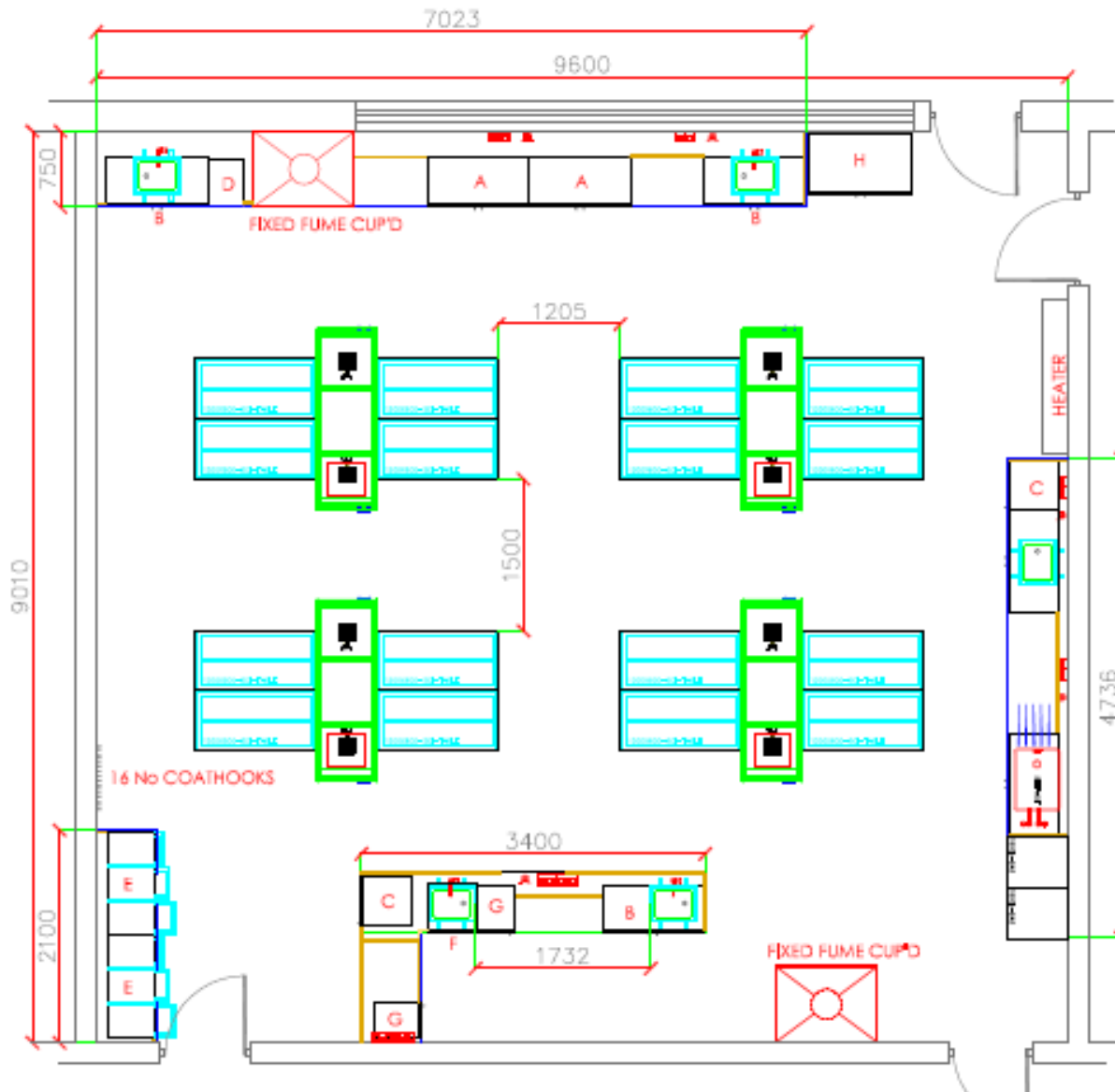


# Home made – slide under benches



Ratton

# Triple length bollards



*Drawing by A-Z Partnerships Ltd*

Staffordshire



# Superlab – Island benches



Hayesfield - Cleeves

# Swirl



Yorks + Humberside SLC

# Kidney



Crossbrooks



# Movable bollards - curvy



West Midlands SLC

# Movable bollards - curvy



ESA Arial

# Jigsaw



Langley Academy

# Movable bollards / adjustable benches



London SLC

# Teardrops



S+B Mercury



# Teardrops - Circle



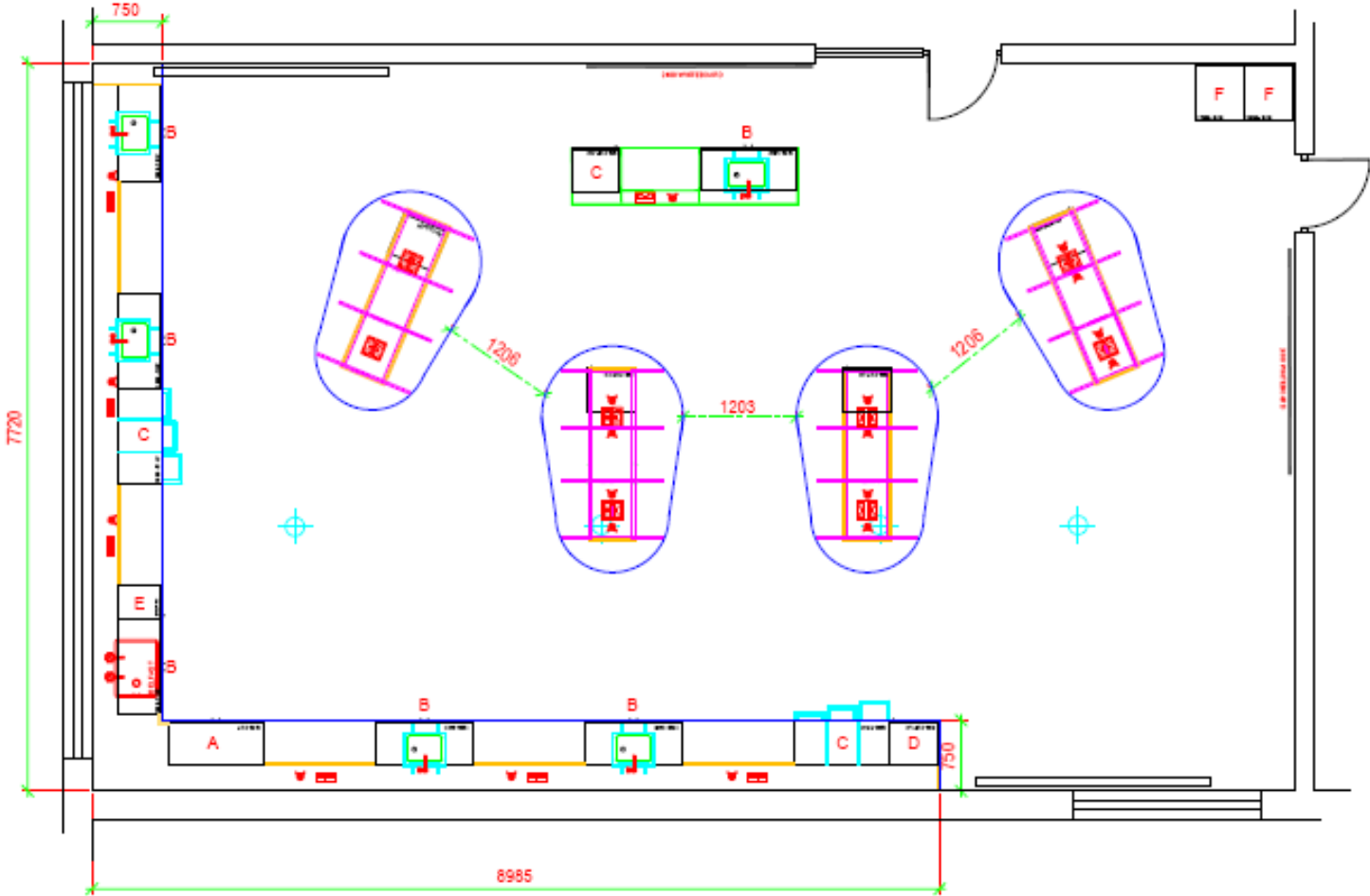
S+B Mercury + Saturn

# Teardrops – tutorial + dem room



LDTL

# Teardrops – wide end forward



Staffordshire

*Drawing by*  
A-Z Partnership Ltd

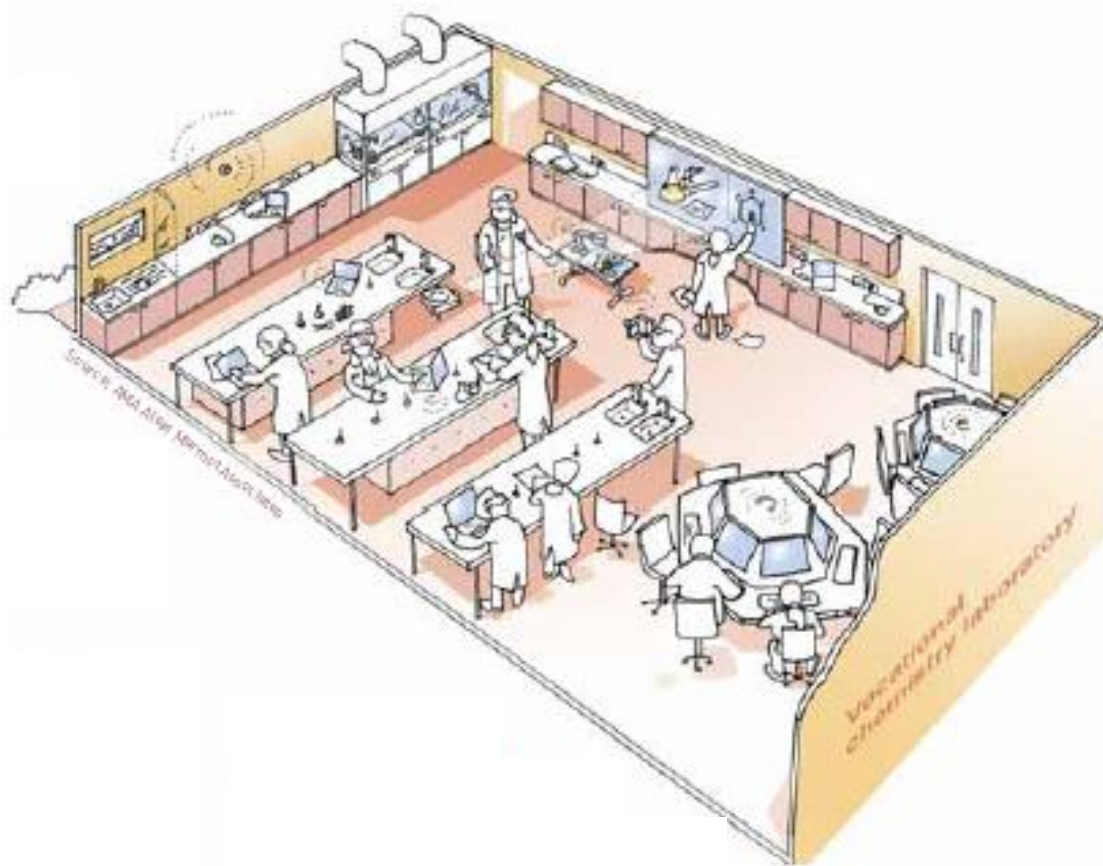
# Centre of circle



Bideford College

Project Faraday

# Vocational Chemistry



JISC

# Wavy – two heights



Key Stage - Discovery

# Secure

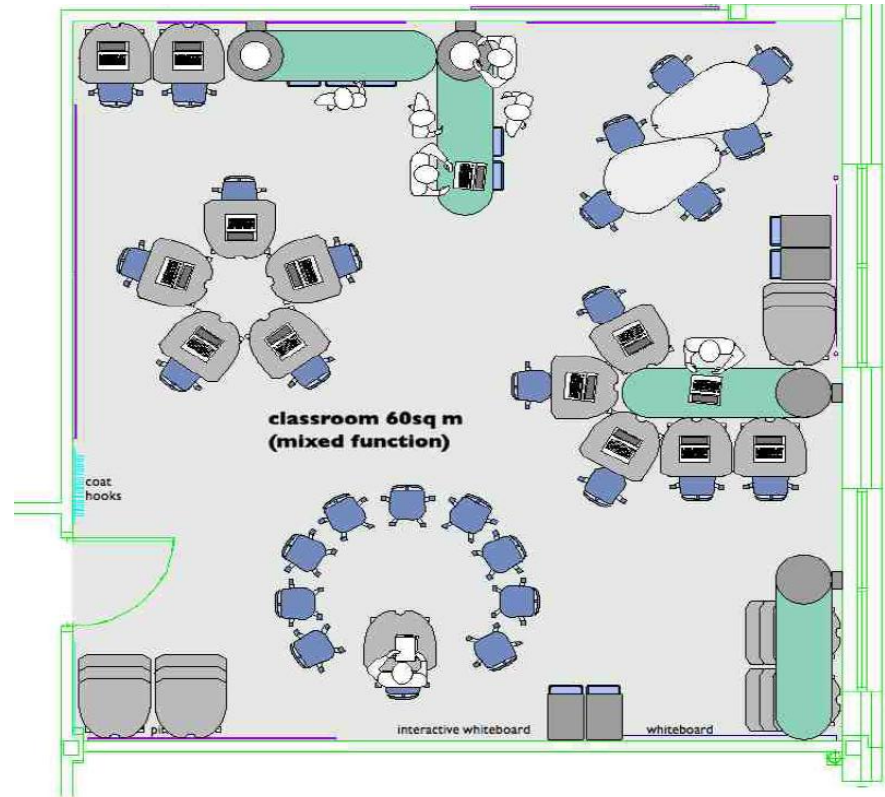


Key Stage - Secure

# Rotatable service bollard



Reaction furniture



British Thornton



# Lab 21 – Lab 1



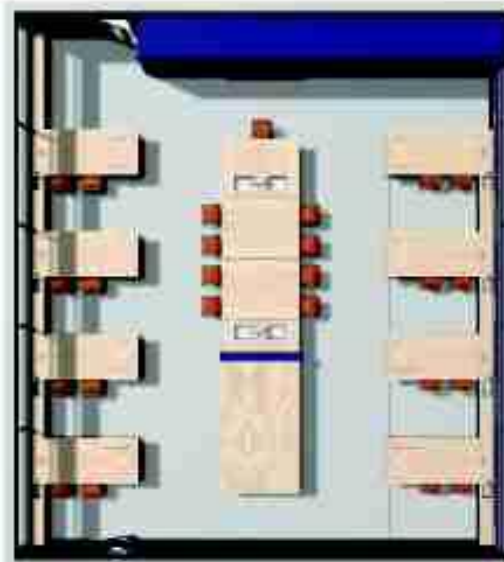
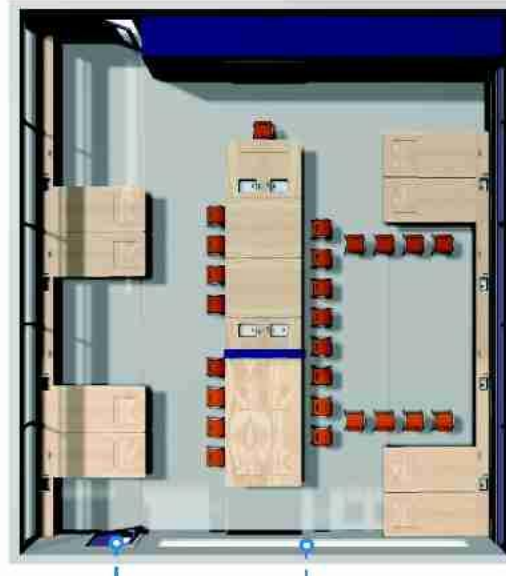
DENI

# Lab 21 – Lab 1



*ICT*

*role play*



*practical*

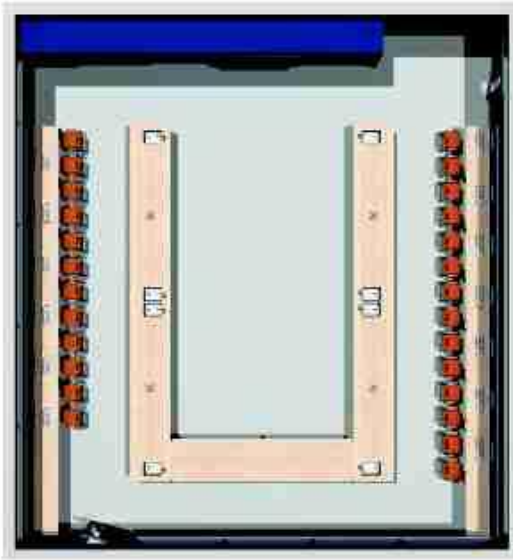
DENI

# Lab 21 – Lab 2

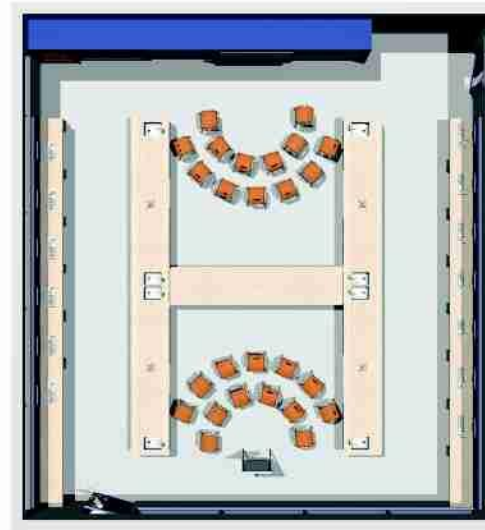


DENI

# Lab 21 – Lab 2

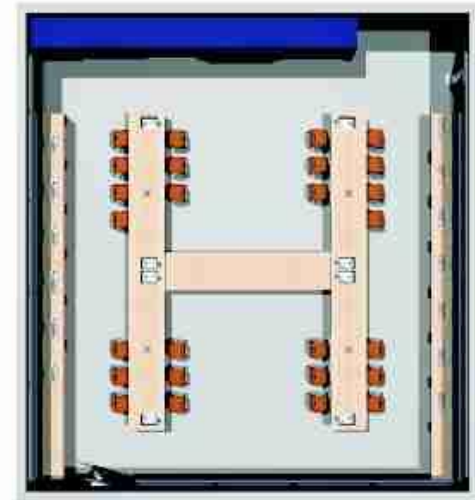


*ICT*



*discussion 1*

*discussion 2*



DENI

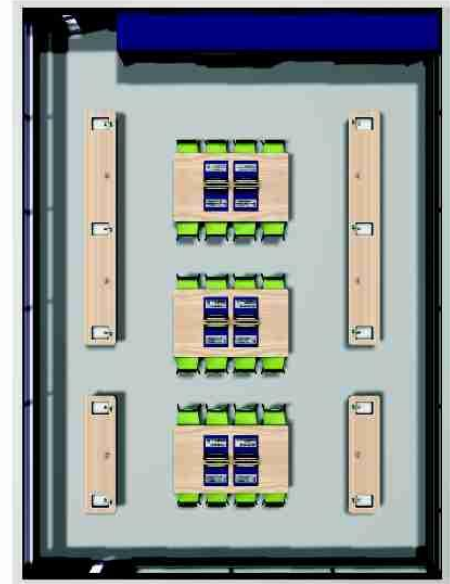
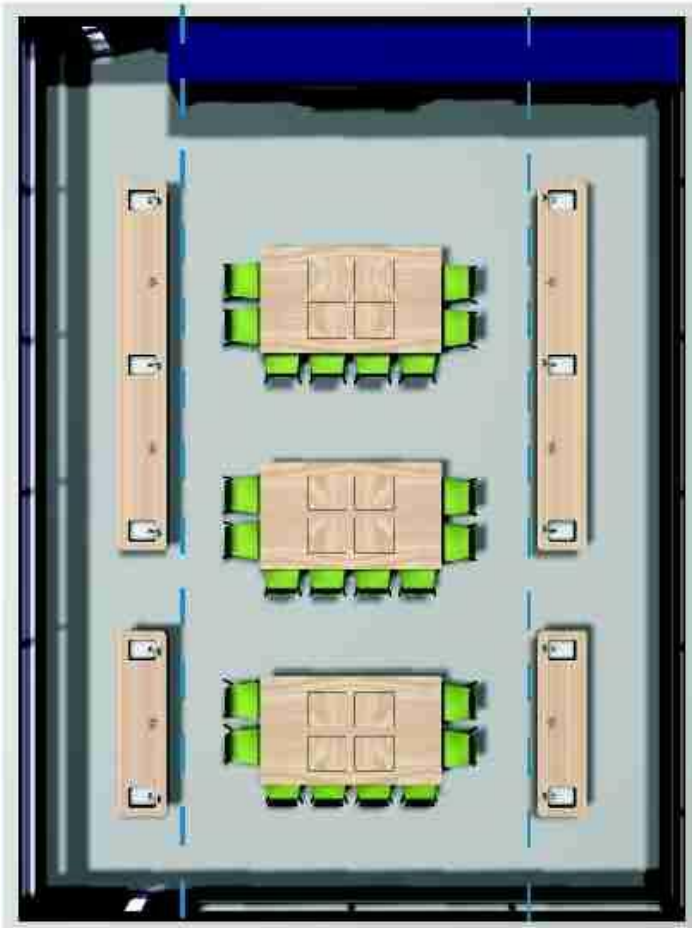
# Lab 21 – Lab 3



DENI

# Lab 21 – Lab 3

Wet Area | Dry Area | Wet Area

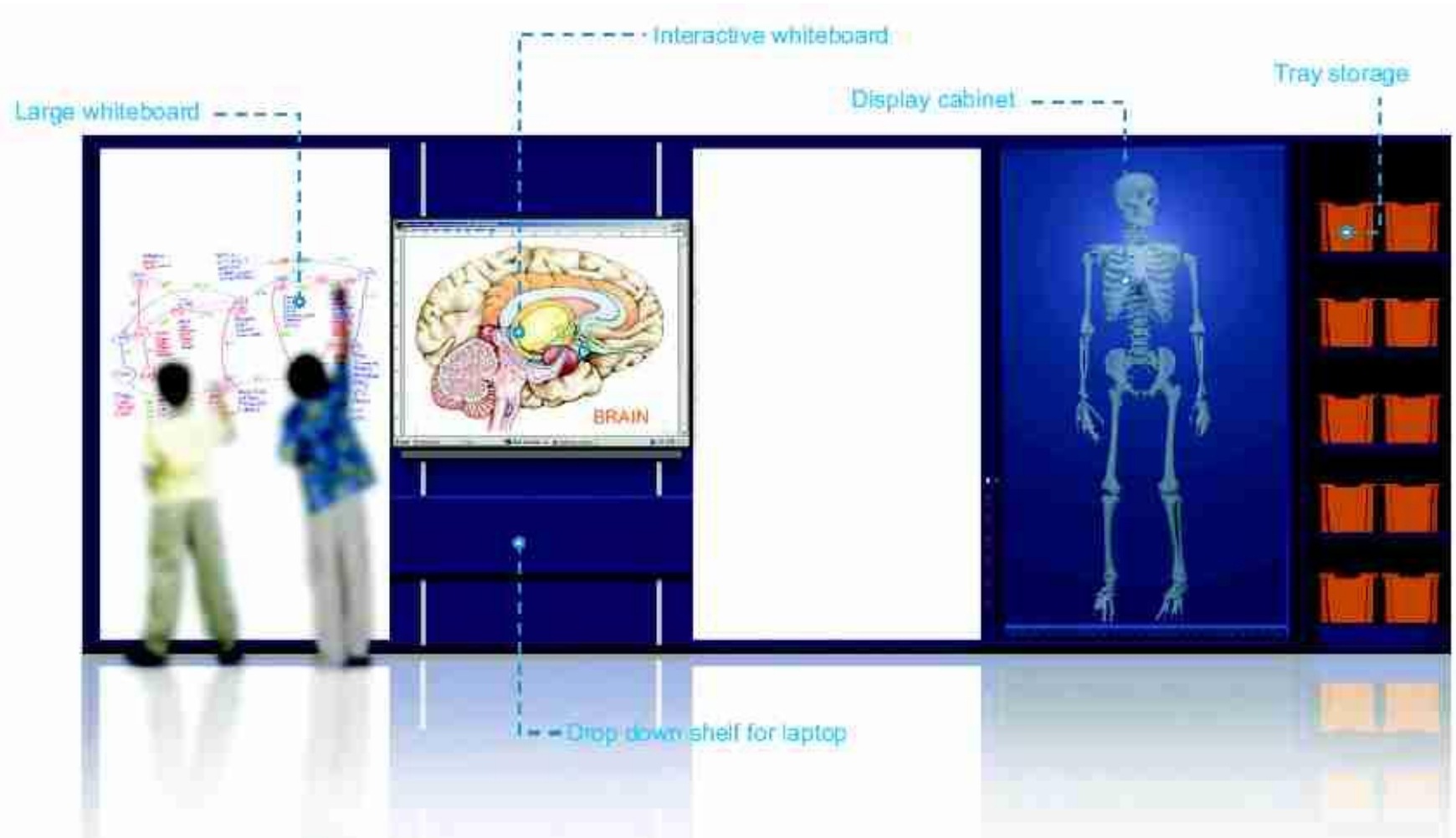


*ICT*

*Wet & Dry*

DENI

# Lab 21 – Teaching Wall



DENI

# Lab 21 – Teaching Wall



DENI

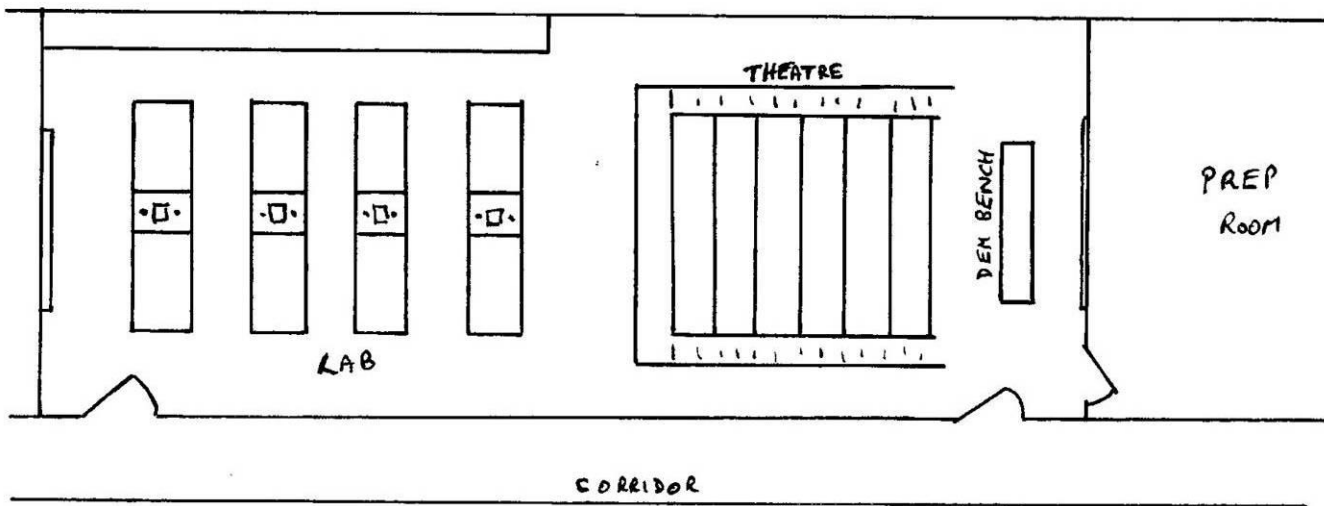


# Secure



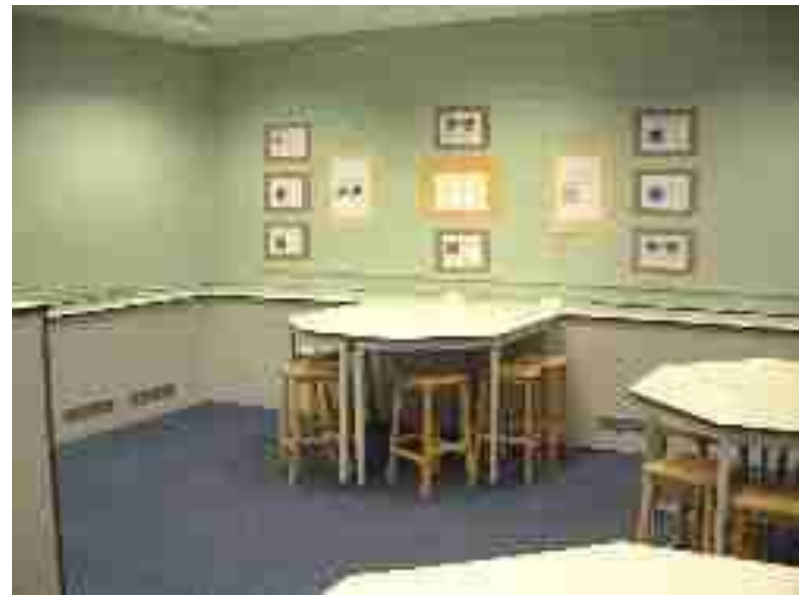
SLC North East with S+B

# Lecture - practical



1970s Grammar School

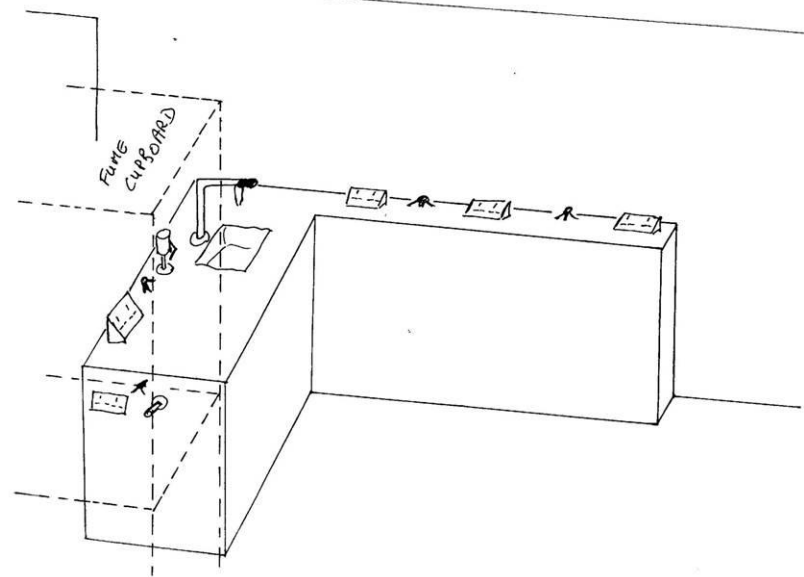
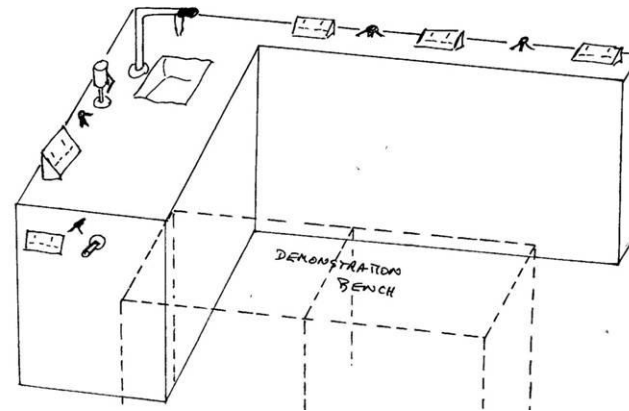
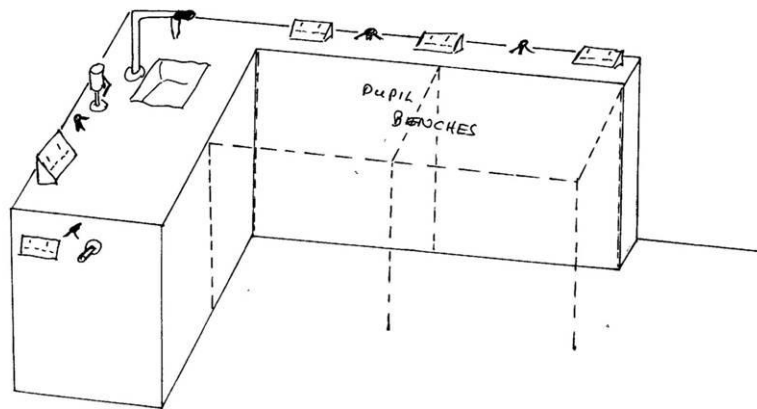
# Lecture - practical



Network

# Flexible

Pupils / Demonstration /  
Fume Cupboard



IntegratED Tong School

# Teacher's bollard/desk



Key Stage

# Demonstration bench



SLC North West

# Teacher's bench



British Thornton

# Special bench - adjustable

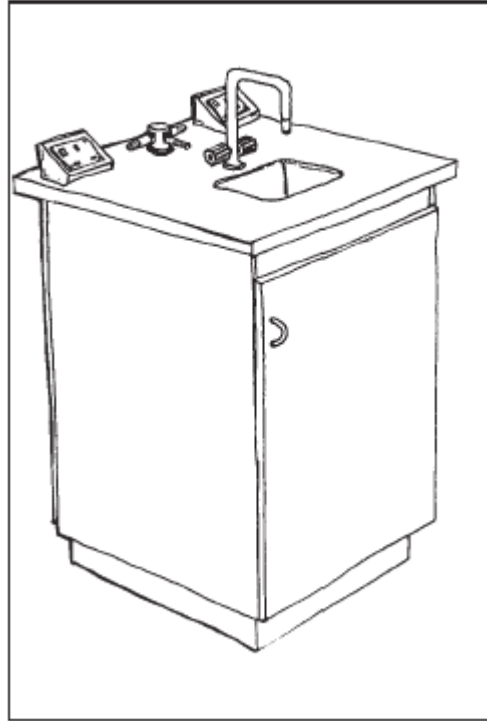


British Thornton



# Service bollard

– same height as benches



DfES BB80, 2004

*(now DfE)*

# Service bollard

- taller than benches



Bluecoat School

# Service bollards fixing mobile benches



S+B Intercon

# Service Bollard on wheels – elec only



Kings School, Peterborough (*Project Faraday*)

# Service bollard with plinth



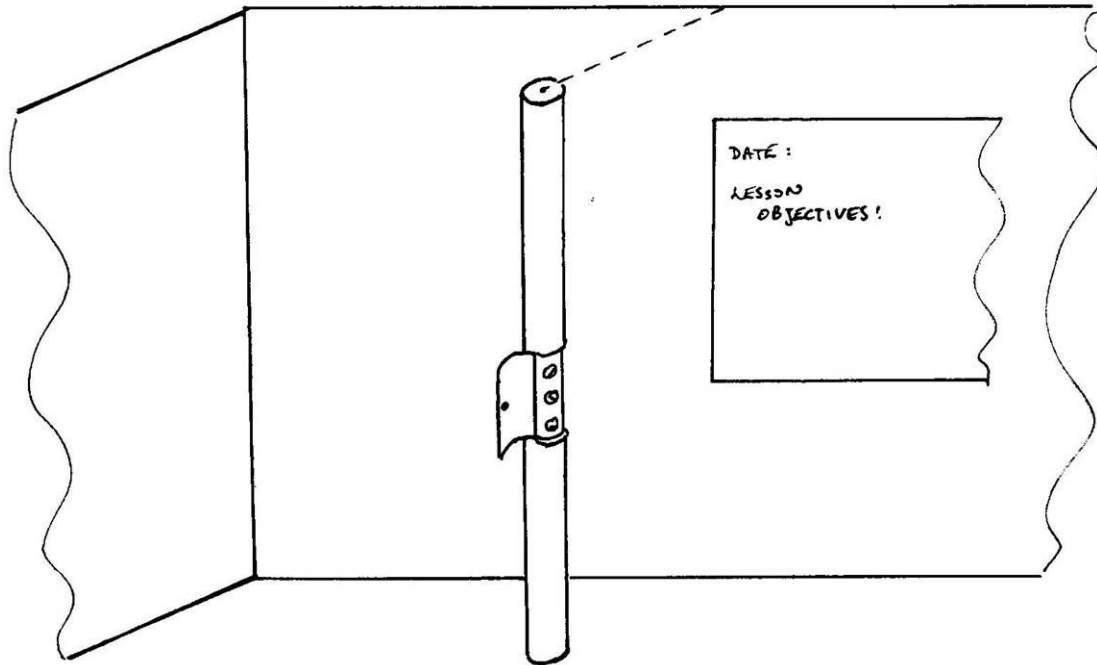
Anon

# Thin perimeter services and display



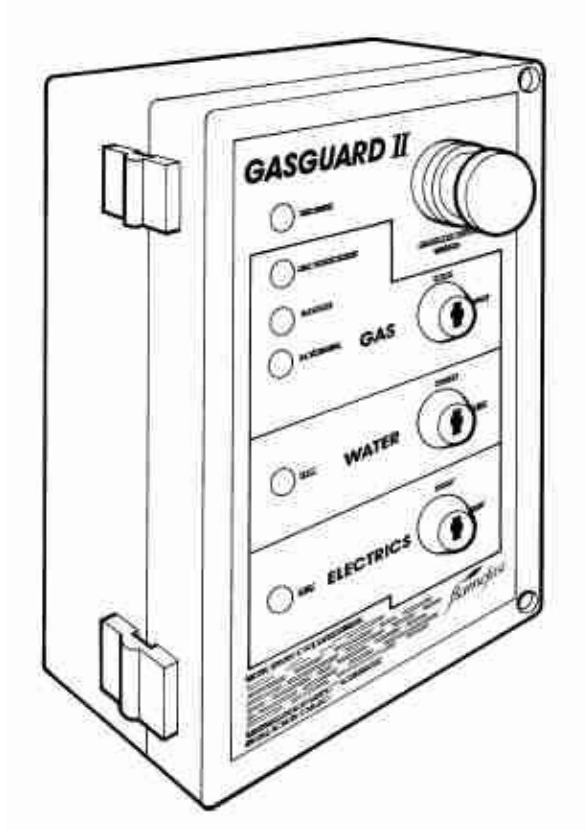
Key Stage – concept design

# Control of all Services – in one place



Mossbourne Academy

# Control of Services – gas / elec / water – key version



Flamefast



# Control of Services – gas / elec / water – software version



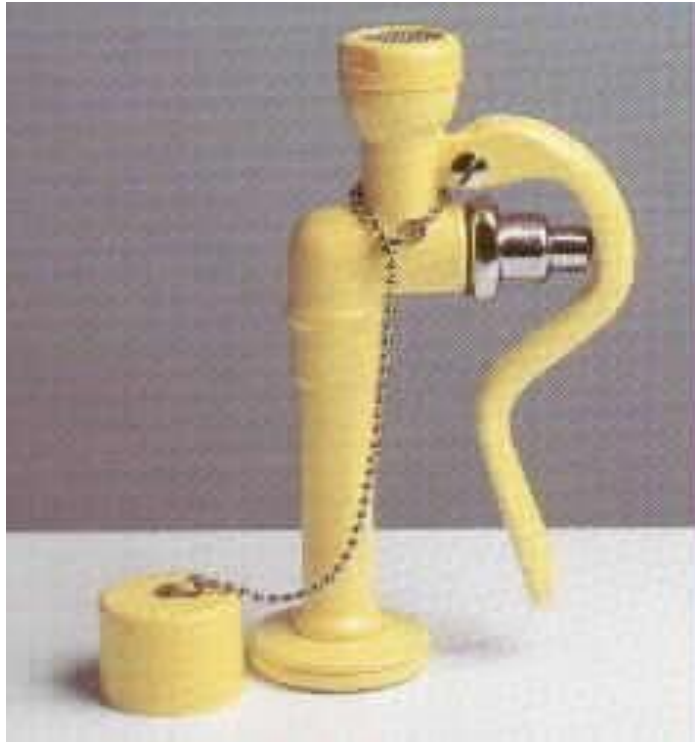
Trio Lab Start  
via 'Heat and Combustion Supplies'

# Health & Safety area



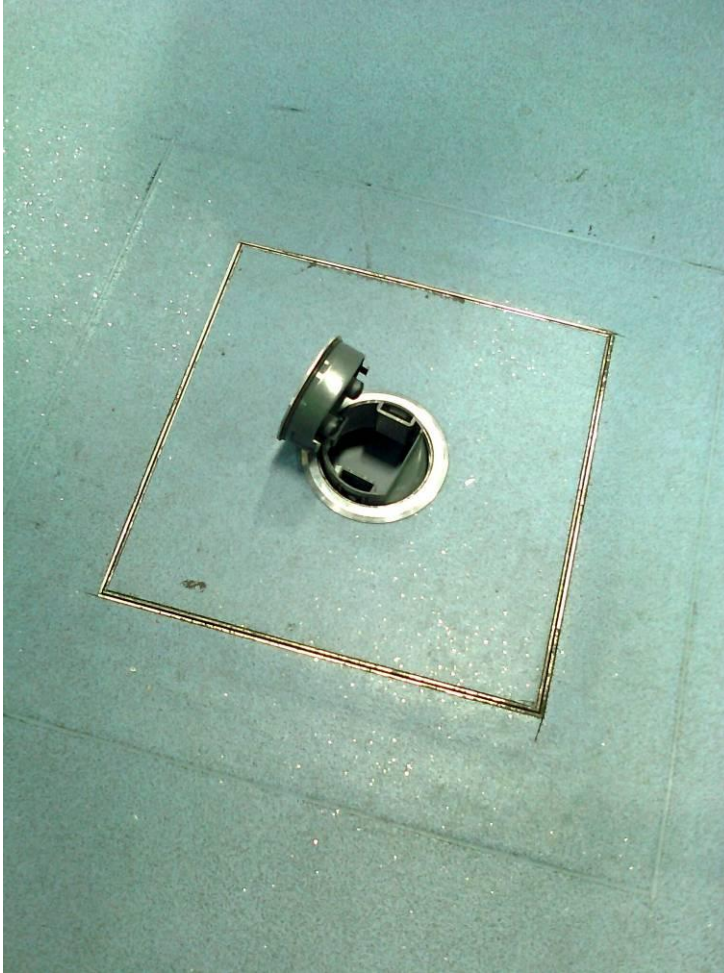
LDTL

# Emergency eyewash



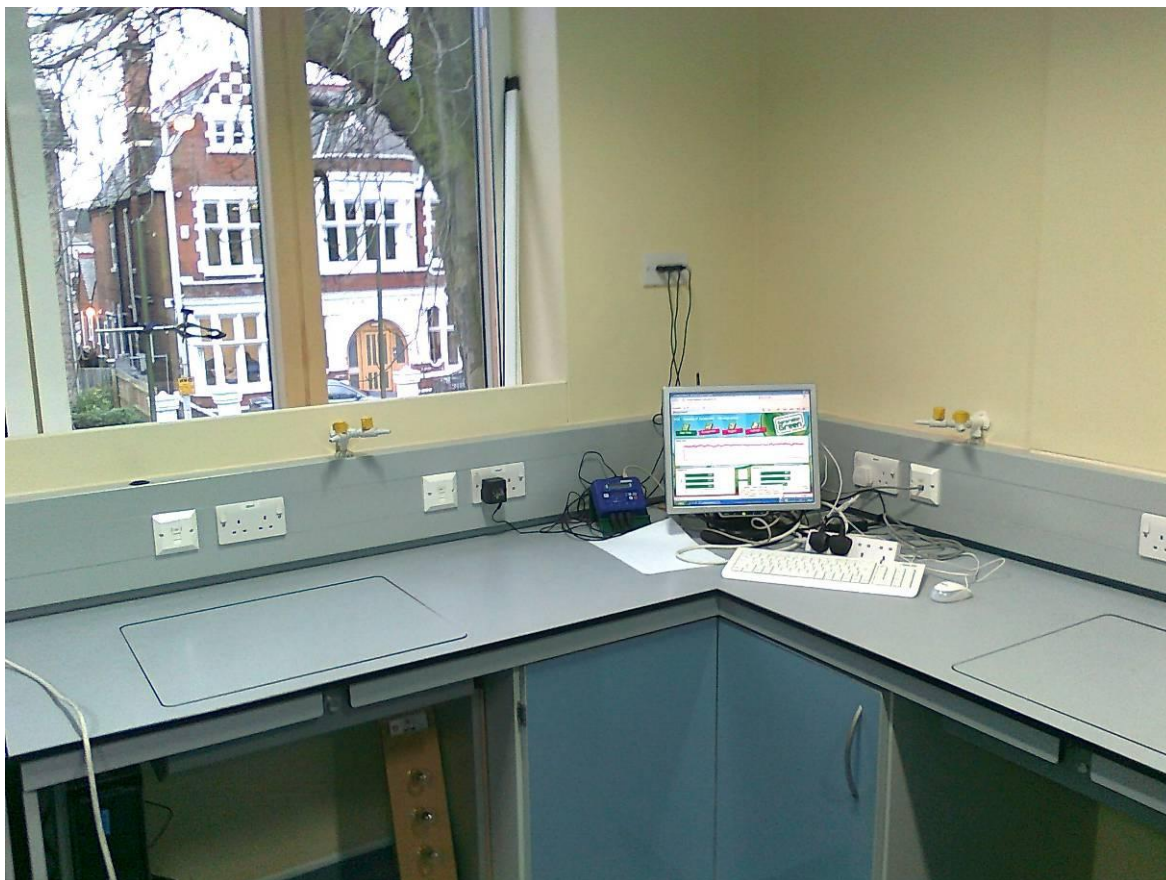
Arboles

# New style electric floor socket



Kings School, Peterborough  
(*Project Faraday*)

# High gas taps – to keep bench clear



Kings School, Peterborough (*Project Faraday*)

# Gallery – benches go under



As lecture theatre



Practical work

King Charles School

# Decoration as Science



DNA in floor



Screens give alternative spaces –  
code for A,G,C,T

King Charles School

# Sedum roof



King Charles School





# Periodic table + chairs!



Drop Zone



East Barnet School (*Project Faraday*)

# Glass brick wall



Bentley Wood School

# Agile



Informal meeting pod

spaceoasis



Touchdown wall

# Agile



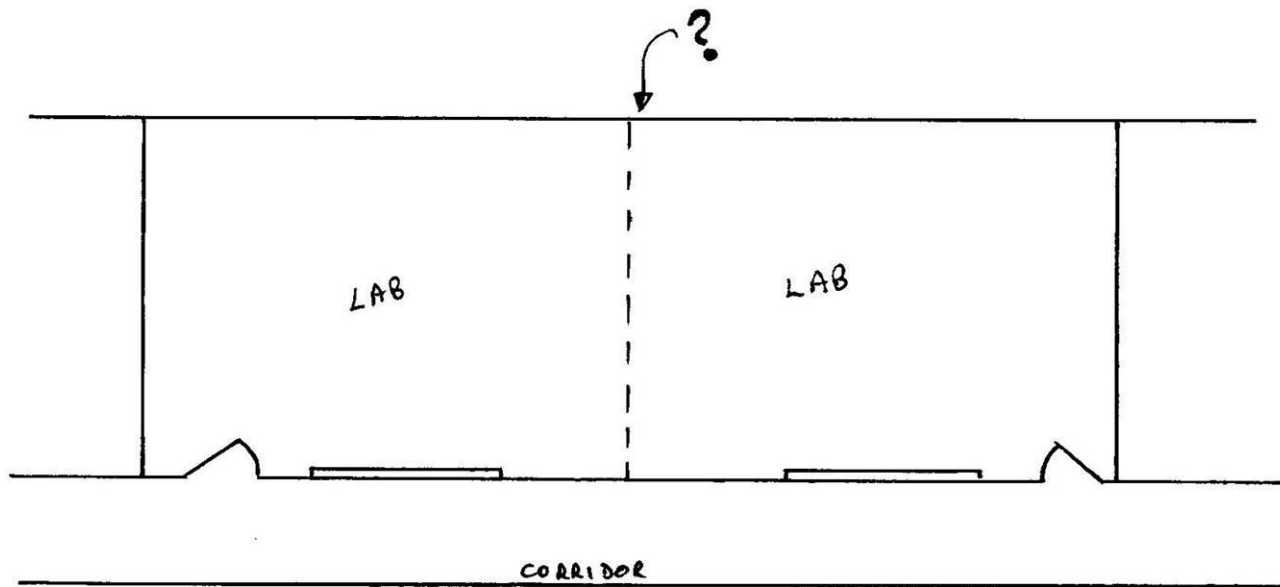
Screened desking oasis

Cleared away

spaceoasis

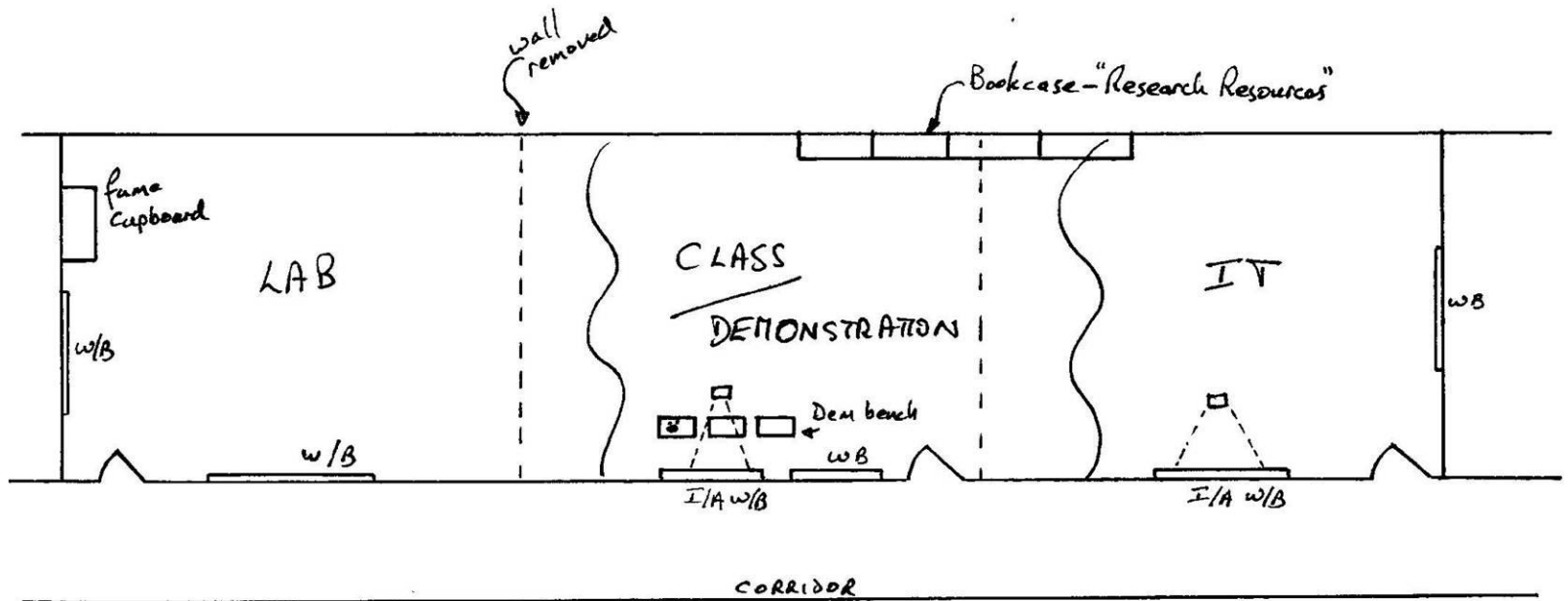


# 2 into 1



Anon

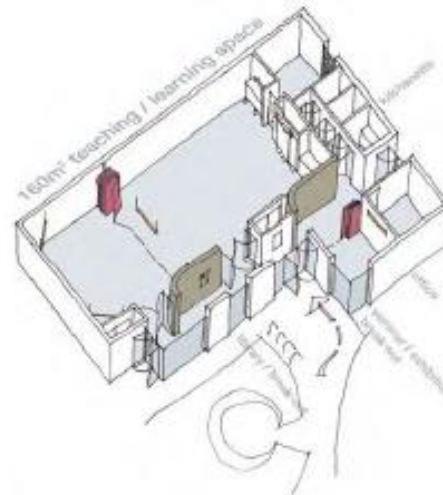
# 3 into 1



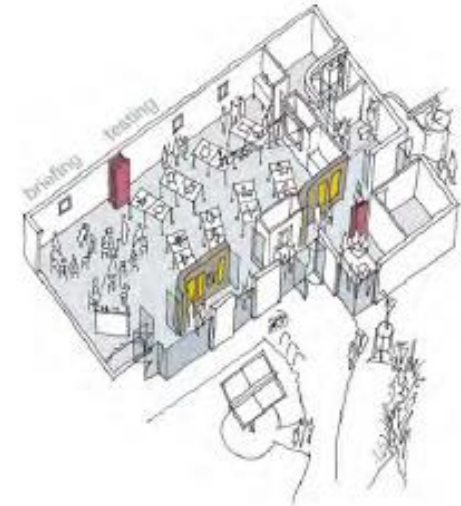
Anon

# Flexible use – Eco-lab

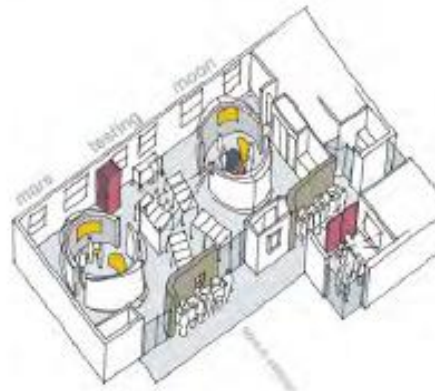
## Project Faraday



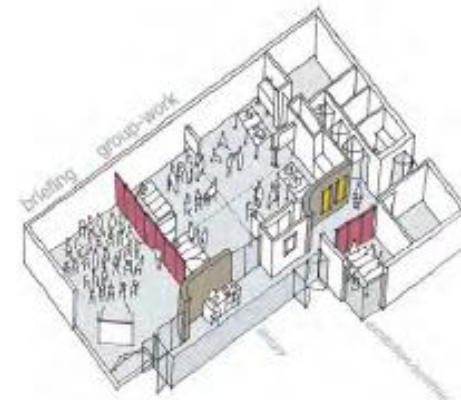
Cut-away view of the eco-lab shell showing key features: a large multi-purpose space with storage walls, breakout space lined with rammed-earth walls, small quiet rooms. The optional layouts shown here demonstrate the centre's flexibility.



The main room is set up to learn about sustainable buildings with one zone for briefing and discussion and another for testing materials. Interactive display in the breakout area is visible on entry. Sustainability features are easily seen by those using the centre.



The whole building is set up for a special project where students play members of a space exploration scheme. Inhabitable 'pods' are used to create different environments and 'space stations' are set up in the breakout area.



The building becomes a field centre. The main room is divided into two spaces – one for briefing about the local habitat and one for analysing samples collected locally. An exhibition in the seminar room and IT resources in the breakout area support independent study.

Mary Webb School  
and Science College

# Prep room -- plants



SLC NW



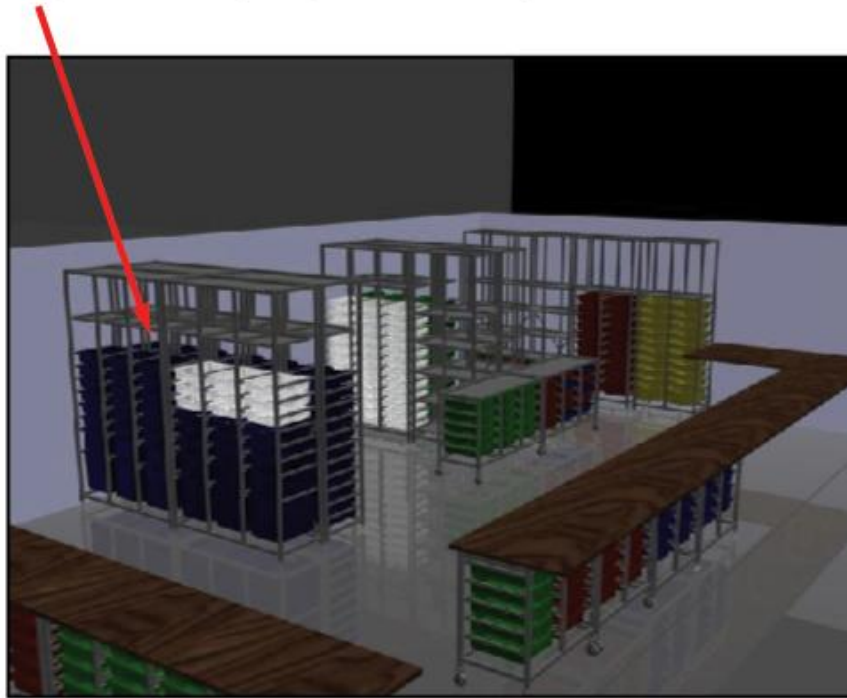
# Prep Room – use of trays



Tower Hamlets College

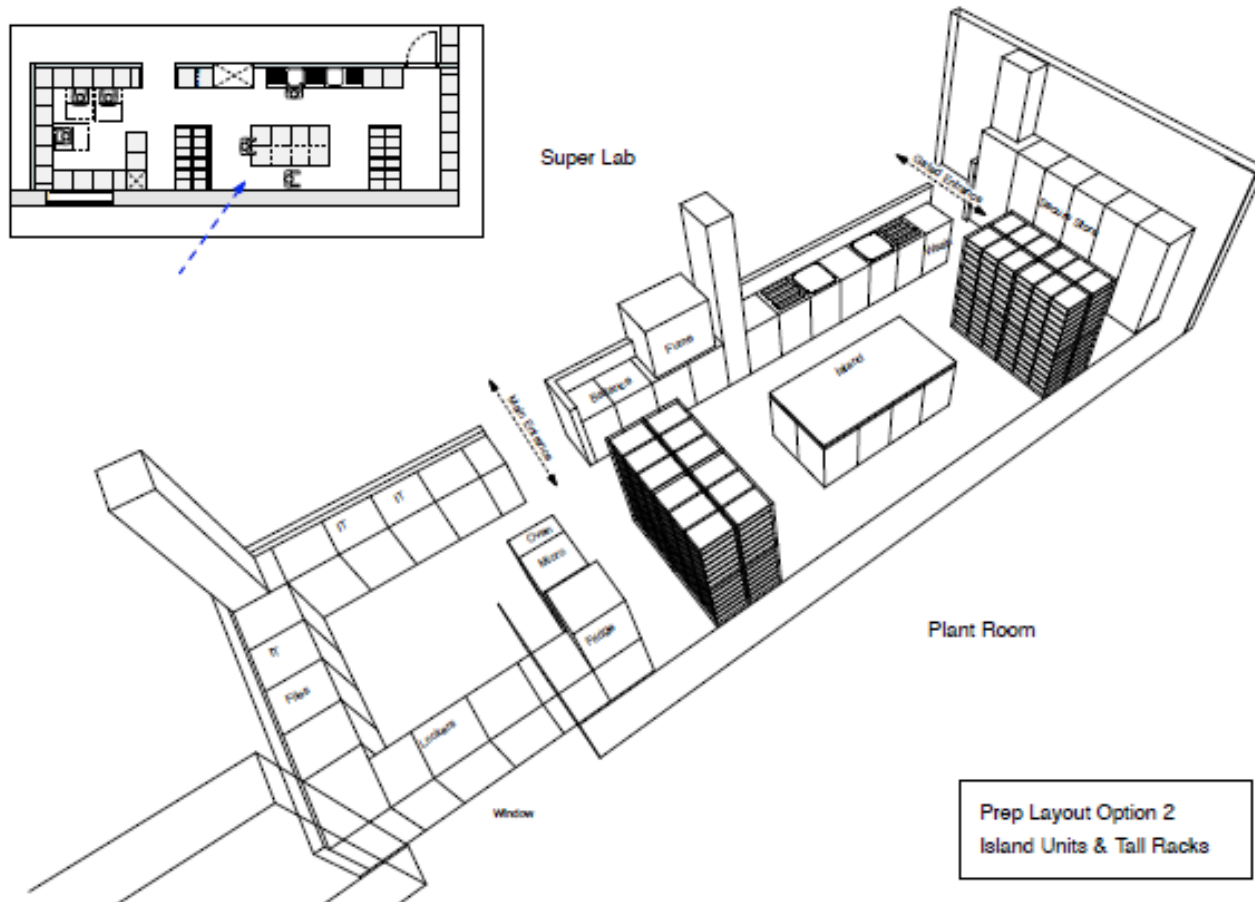
# Prep Room – height of storage

No trays above eyesight for safety reasons



Gratnells

# Superlab – Open Prep



Hayesfield